Area South of I-10 (Southern Impoundment)

Principle chemicals of potential concern for human health in the southern impoundment were dioxins/furans, arsenic, benzo(a)pyrene and PCBs (see Table 1-2 [from the RI Report, already listed above in HH NI section] for all COPCs and Table 1-2 [from the BHHRA] for COPCs specific to the southern impoundment). Risks were characterized for three potential receptor groups: trespassers, commercial workers, and future construction workers. Exposure scenarios are presented in Table 5-1 of the BHHRA [already listed above], and exposure parameters are presented in Table 6-2 from the BHHRA. The exposure medium evaluated for this area was soil. The area of investigation south of I-10 and sampling points are shown in Figure 2-11 [of the RI], and the conceptual site model is presented in Figure 1-2 [from BHHRA]. For each scenario, potential exposures were evaluated via direct contact with soil (i.e., ingestion and dermal contact). For the hypothetical future construction worker, noncancer and TEQ_{DF} cancer HIs were greater than 1 (see Table 6-3 from BHHRA) for scenarios that assumed exposure to exposure units DS-1, DS-2, and DS-4 (see Figure 6-2 from BHHRA). For these scenarios, over 99 percent of the estimated risk is attributable to assumed exposure to TEQ_{DF} in soils. For both the hypothetical commercial worker and trespasser scenarios, all cumulative risks are below 1×10^{-4} and noncancer and dioxin cancer hazards are below 1 (see Table 6-3 from BHHRA). The parameters used for evaluating potential exposures and estimating risks and hazards relied on multiple conservative assumptions, which enhance the likelihood that potential assumed exposures and estimated risks are overestimated.